Datasheet for the decision of 20 December 2007

Case Number: T 1095/05 - 3.5.02
Application Number: 00985443.1
Publication Number: 1236189
IPC: G08B 21/00
Language of the proceedings: EN
Title of invention: A safety device
Applicant: Pitts-Crick, Jonathan
Headword: -

Relevant legal provisions: EPC Art. 54, 56
Relevant legal provisions (EPC 1973): -
Keyword: "Inventive step - (yes, after amendment)"
Decisions cited: -
Catchword: -
Case Number: T 1095/05 - 3.5.02

DECISION
of the Technical Board of Appeal 3.5.02
of 20 December 2007

Appellant: Pitts-Crick, Jonathan
Burnett House
Burnett
Bristol BS31 2TF (GB)

Representative: Greenwood, Matthew
K R Bryer & Co.
7 Gay Street
Bath BA1 2PH (GB)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 24 March 2005 refusing European application No. 00985443.1 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: M. Ruggiu
Members: G. Flyng
P. Mühlens
Summary of Facts and Submissions

I. The applicant appealed against the decision of the examining division refusing the European patent application No. 00 985 443.1.

II. In the contested decision, the examining division considered that, in view of the prior art disclosed in:

D1: WO-A-99/28880,

the subject-matter of claim 1 of the main request lacked novelty, Article 54 EPC, or at least inventive step, Article 56 EPC. The examining division held furthermore that claim 1 of auxiliary requests 2, 3 and 7 lacked novelty from D1 and claim 1 of auxiliary requests 1, 4, 5 and 6 lacked an inventive step from D1.

III. In the written statement setting out the grounds for the appeal the appellant requested cancellation of the decision relating respectively to the main request and each of the auxiliary requests 1 to 7. The appellant also submitted a further set of amended claims as an eighth auxiliary request.

IV. With a letter dated 5 October 2007 the appellant filed replacement pages 18 to 20 of the claims (claims 1 to 17) and replacement description pages 2, 2a, 7, 9, 12, 14, 16 and 17 and requested that these be substituted for the corresponding pages currently on file. The appellant noted that the amended claims corresponded to the former eighth auxiliary request.
V. With a letter dated 29 October 2007 the appellant filed a replacement page 18 of the claims (claims 1 to 4) and replacement pages 2, 2a and 5 of the description and requested that these be substituted for the corresponding pages currently on file.

VI. With a further letter dated 30 November 2007 the appellant filed replacement pages 18 to 20 of the claims (claims 1 to 16) and replacement pages 2 and 2a of the description and requested that these be substituted for the corresponding pages currently on file.

VII. The applicant requests cancellation of the decision and grant of a patent on the basis of the following application documents:

Description:
- Pages 1, 3, 4, 6, 8, 10, 11, 13 and 15 as originally filed;
- Pages 2 and 2a as filed with the letter of 30 November 2007;
- Page 5 as filed with the letter of 29 October 2007;
- Pages 7, 9, 12, 14, 16 and 17 as filed with the letter of 5 October 2007;

Claims:
- Nos. 1 to 16 as filed with the letter of 30 November 2007

Drawings:
- Sheets 1/5 to 5/5 as originally filed.
VIII. Claim 1 reads as follows:

"Sensor means for monitoring the awareness status of an individual within a monitored environment (250) comprising means for determining the attainment of at least one predetermined condition identifying the requirement for the awareness of an individual to be monitored, and operative to trigger an alarm (270), and means (210) operable by the monitored individual for inhibiting the operation of the alarm, and delay means (348) for delaying triggering of the alarm for a predetermined period after the attainment of the said predetermined condition, characterised in that the means for inhibiting the alarm are resiliently biased to an alarm activating position and require deliberate muscular effort to overcome the resilient biasing, and in that the sensor means further comprises second means (290) for inhibiting operation of the alarm located externally of the monitored environment and operable by a supervisor able to maintain supervision of the monitored environment."

Claims 2 to 16 are dependent on claim 1.

IX. The appellant essentially argued as follows:

Document D1 represented the closest prior art. The problem solved by the invention was how to allow an individual to use the toilet if the user was unable to operate the means for inhibiting the alarm and to ensure that a supervisor must remain in the immediate area of the monitored environment in order to inhibit operation of the alarm in addition to or in place of the inhibition means operable by the user. The solution of
providing a second means for inhibiting operation of the alarm located externally of the monitored environment and operable by a supervisor able to maintain supervision of the monitored environment was not to be found in the prior art.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Amendments**

Present claim 1 differs from claim 1 as originally filed by the features set out in the characterising portion. Claims 11, 12 and 20 of the application as filed provide a basis for the characterising features.

Dependent claims 2 to 14 and 16 are respectively supported by dependent claims 2 to 10, 13, 17, 18, 19 and 16 of the application as filed. Dependent claim 15 is supported by dependent claims 13 to 15, the description at page 17, lines 14 to 20 and figure 7 of the application as filed.

3. **Novelty and Inventive Step**

3.1 Document D1 is the closest available prior art. It provides "a control device for a toilet with regard both to the presence of a user within the toilet and to his psychophysical condition" (page 1, lines 3 to 5). Furthermore, the control device "enables a user overcome with sudden illness to indicate his condition to the outside" (page 1, lines 6 to 8). From these
passages it is clear to the board that the device of D1 constitutes a "sensor means for monitoring the awareness status of an individual within a monitored environment" as set out in claim 1.

3.2 The control device of D1 comprises (page 2, lines 4 to 15) "a control unit housed in a box structure 4" and which "controls:

- a sensor 7 housed in the box structure 4 for sensing the presence of a person in the toilet,
- an infrared proximity sensor 8 positioned to one side of the bowl at a height such as to sense the presence of the head of a person seated on the bowl,
- a pressure sensor 9 positioned on the upper side of the bowl,
- an infrared proximity sensor 10 positioned on the ceiling; its range of action embracing the space below the bowl".

D1 states at page 5, lines 1 to 6 that "at the moment in which the user enters the toilet and closes the door, a sensor connected to it causes the control unit to activate the timer which monitors the time for which the user remains in the toilet. This time is related to the position which the user assumes relative to the bowl, ie whether he sits on it or remains standing, this situation being determined by pressure sensor 9 and/or presence sensors 7 and 10". The sensor connected to the door thus determines when a person has entered the toilet. As in the present application, this condition identifies the requirement for the awareness of an individual to be monitored. Hence, in document D1, the sensor connected to the door represents a "means for
determining the attainment of at least one predetermined condition identifying the requirement for the awareness of an individual to be monitored" as set out in claim 1. Furthermore, the timer of D1 represents "delay means for delaying triggering of the alarm for a predetermined period after the attainment of the said predetermined condition" as set out in claim 1.

3.3 Document D1 further states at page 3, lines 4, 5, 17 and 18 that "to the cover of the compartment housing the control unit there is applied ... an indicator 52 indicating that a person has remained within the toilet beyond a predetermined maximum time period". According to page 5, lines 11 to 14, "after a certain time period, if the user has not yet left the toilet, a digitalized sound signal informs him that the time allotted to him is about to expire, on which if the user wishes to prolong his presence in the toilet he merely has to operate an appropriate confirmation pushbutton" (emphasis added). "If having suffered sudden illness the user is unable to operate this pushbutton, on termination of the allotted time an audible and light-emitting alarm inform external personnel of an abnormal situation within the toilet. At the same time the control unit unlocks the door to enable rescuers to enter the toilet" (page 5, lines 15 to 19, emphasis added). This alarm is thus triggered by the sensor means as required by claim 1. Furthermore, the pushbutton constitutes "means operable by the monitored individual for inhibiting the operation of the alarm" as set out in claim 1.

3.4 Considering the feature that "the means for inhibiting the alarm are resiliently biased to an alarm activating
position and require deliberate muscular effort to overcome the resilient biasing", the applicant has argued that D1 was silent as to the type of pushbutton and that the pushbutton could be one of a number of types that are not biased to an alarm activating position, for example a pressure sensitive switch.

The board is aware of the existence of two main types of pushbutton switch. In the more common momentary action type of pushbutton switch, the button after being pushed returns to its original position under the action of a spring or some other resilient component. In the more specialised latching type of pushbutton switch, however, the button is not necessarily resiliently biased and after being pushed, it remains in that position. D1 does not explicitly mention which type of pushbutton switch should be used. The feature that "the means for inhibiting the alarm are resiliently biased to an alarm activating position and require deliberate muscular effort to overcome the resilient biasing" is thus considered to be novel over document D1.

A question to be considered, however, is whether it would be obvious for the skilled person, faced with the problem of selecting an appropriate type of pushbutton for the D1 device, to use a pushbutton of the well known momentary action type.

According to D1 (page 5, lines 11 to 14), the user can "prolong his presence in the toilet" by operating the pushbutton. There is no suggestion here that the user is able to permanently disable the alarm, but merely that he is able to extend the available time. The board
considers that a momentary action pushbutton would be the obvious choice to achieve this functionality.

Furthermore, in D1, if the pushbutton is not pushed, the alarm will be given upon termination of the allotted time. It follows from this that the pushbutton when not pushed is in an alarm activating position. To prolong his presence in the toilet and hence inhibit the alarm, the user has to push the pushbutton - an action which would necessitate some deliberate muscular effort.

3.5 The final remaining feature of claim 1 is that "the sensor means further comprises second means (290) for inhibiting operation of the alarm located externally of the monitored environment and operable by a supervisor able to maintain supervision of the monitored environment."

Document D1 does not disclose or suggest any alarm inhibiting means located external to the monitored environment (toilet).

Having regard to the technical effect achieved by the externally located alarm inhibiting means, the board considers that the invention solves the objective problem of enabling the safe use of the toilet by a user who is unable to operate the means for inhibiting the alarm.

In the International Preliminary Examination Report, the subject-matter of the then claim 15, which specified the alarm inhibiting means located external to the monitored environment, was considered to be a
"usual design measure falling within the competence of the average skilled person" (see separate sheet, Re Item V, paragraph 3). The board is unable to find any basis for this preliminary opinion. In particular, the only other document cited in the international search report (D2 = DE 196 25 558 A) does not address the problem of a user being unable to inhibit the alarm and does not disclose or suggest to provide an alarm inhibiting means located external to the toilet.

3.6 For the foregoing reasons, in the board's judgement the subject-matter of present claim 1 is considered to involve an inventive step within the meaning of Article 56 EPC.

2649.D
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to grant a patent in the following version:

Description:
- Pages 1, 3, 4, 6, 8, 10, 11, 13 and 15 as originally filed;
- Pages 2 and 2a as filed with the letter of 30 November 2007;
- Page 5 as filed with the letter of 29 October 2007;
- Pages 7, 9, 12, 14, 16 and 17 as filed with the letter of 5 October 2007;

Claims:
- Nos. 1 to 16 as filed with the letter of 30 November 2007

Drawings:
- Sheets 1/5 to 5/5 as originally filed.

The Registrar: The Chairman:

U. Bultmann M. Ruggiu

2649.D